

# HD Digital Video Microscope

BVM-2000N



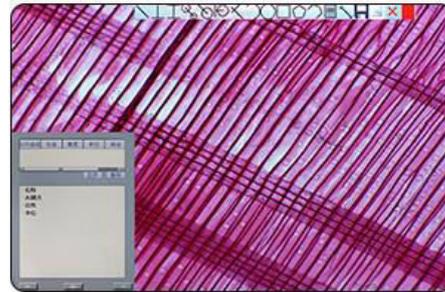
# PRODUCT DETAIL



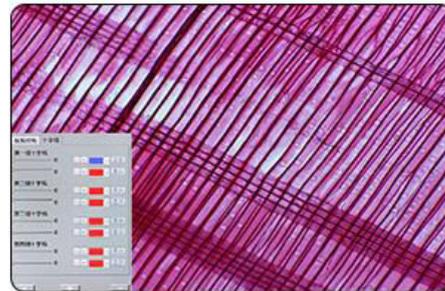
## PRODUCT PARAMETER

Magnification	12X-78X, Extend to 9X-155X
Objective Lens	0.7X-4.5X
Illuminant	LED light built-in design
Interface	HDMI/VGA Port
Screen	12" (282*178mm)
Display resolution	1080P HD LCD screen
Function	Camera drawing, video display, graphic measurement, video recording.
Inspection	High definition optical inspection
Upgrade	Access to usb storage and upgrade
Measurement	Connect the mouse to operate

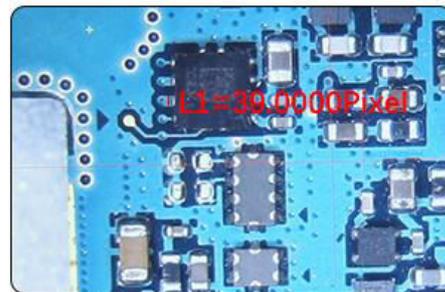
## PRODUCT USE



Video Display



Camera Screenshot



Picture Measurement

## Introductions:

This is a new design and Exclusive digital video microscope. Its functions include Camera drawing, video display, graphic measurement, video recording, which is not only for mobile phone repair but also jewelry welding and more precision welding works. 12-78X magnification details will be display on 12 inch screen with 1080 HD resolution. Graphic measurement function of this microscope will help you solve more problems.

The BVM-2000N is an intelligent digital microscope. Due to the many accessories it can be used in many areas. Among other things, it is also useful in the following fields: industry, life sciences, mineralogy, insect barn, botany, crime lab, education, etc. For its simplicity, its use is easy to learn.

## Main Specifications:

## Microscope:

Magnifications: 12X-78X(ZOOM) (optional magnifications: 9X-220X)

Built in 0.35X Video Coupler; 0.5X for options.

Standard 1X Objective Lens; 0.75X, 1.5X and 2X for options.

FOV: 23mm- 3mm; Max. 30mm for options

Working Distance: 100mm; Max.198 for options

Base Size: 260mm(X)\*320mm(Y)

Height of the microscope: 480mm

Weight of the microscope: 5.5kgs

## Camera:

2.0M HDMI, true color, no delay.

Max. Resolution: 1920\*1080

Sensor: 1/2.86 inch SONY sensor

Pixel Size: 2.75\*2.75 $\mu$ m

Frame Rate: 60fps@1920\*1080

SNR: 65DB

## LCD Display:

12 inch HD LCD display, 1080P, wide screen, multi angle adjustment.

## Illumination:

High quality LED illumination, 144 LED bulbs.

## Operation:

Wireless mouse or manual operation, image capture, U disk storage and measurement.

## Features:

This is an intelligent all in one microscope. Support high definition video/manual measurement/photographing/video/USB drive storage/image freezing/measuring data EXCEL output/graphic primitive EXCEL output/single reticle/double reticle/four transverse lines and four vertical lines/white balance adjustment/gain adjustment/saturation adjustment/reflection elimination adjustment/brightness adjustment/HDR depth of field adjustment/buttons and mouse dual control. An External HDMI Output is available for connecting a larger HDMI LCD display. USB interface for U-Disk storage.

**Quickly, Exactly, Simply**



Simple turning on, with blue feedback.



Uniform led illumination.



Quick focus adjustment.



Ergonomically placed controls.



Zoom magnification.



USB connection for handling and saving.



HD LCD monitor (12")

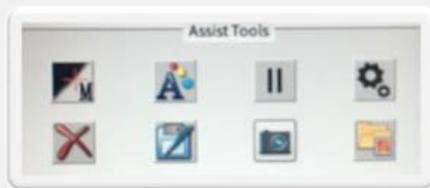


## Comfort, magnification and speed

With the BVM-2000N Digital Microscope, working fast and easy. The 12 "HD resolution monitor provides sharp, high-quality images.

The ergonomically tilting monitor makes the instrument comfortable and not tiring. The monitor image can be displayed on multiple screens simultaneously with HDMI splitter, so it's great for use in education as well. Manual focus and zoom enable quick setting.

## Simple measurement and photography



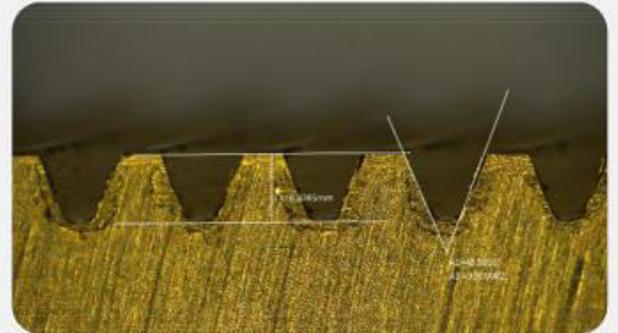
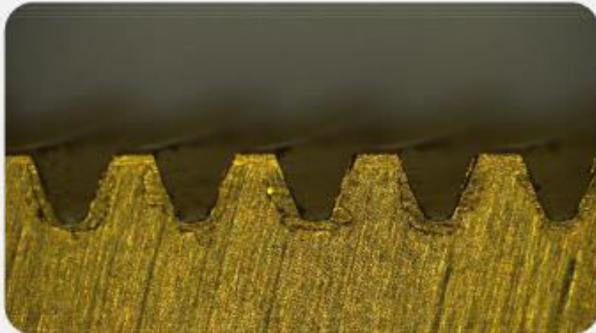
User-friendly software lets you take pictures and measurements quickly and easily.

Images can be saved on an external drive.

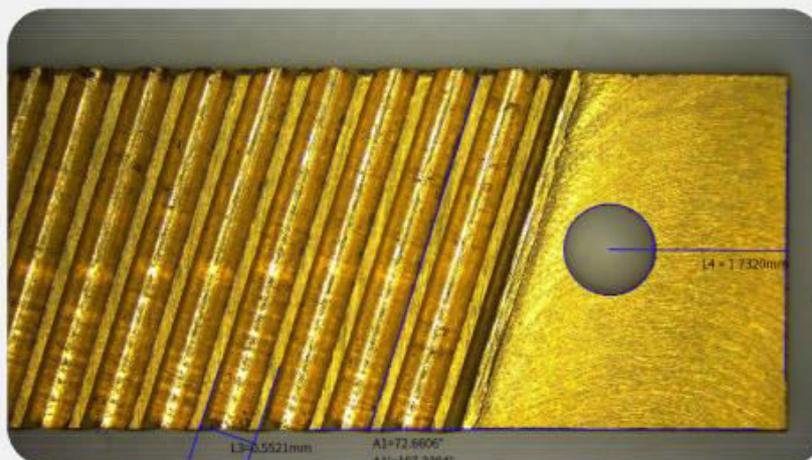
The measurements can also be saved in an excel format for an external drive.



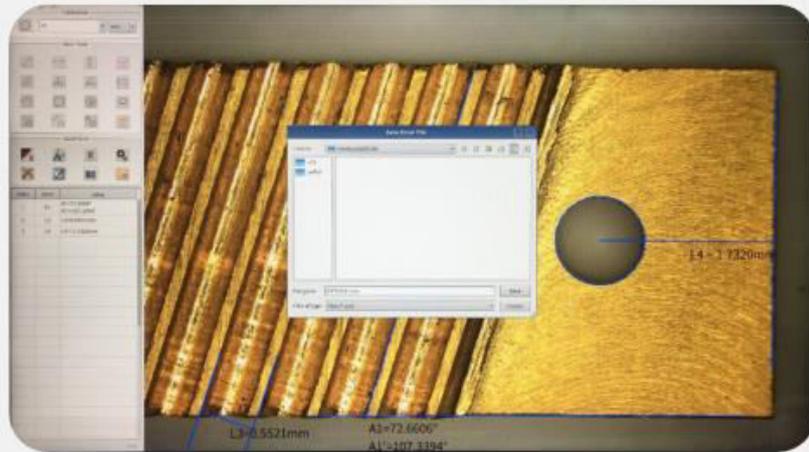
In the simple user interface, you can choose from 14 different measurement functions. Measurement data, text field and cross-linkable data can be attached to the image. The edge search function makes the measurements more accurate.



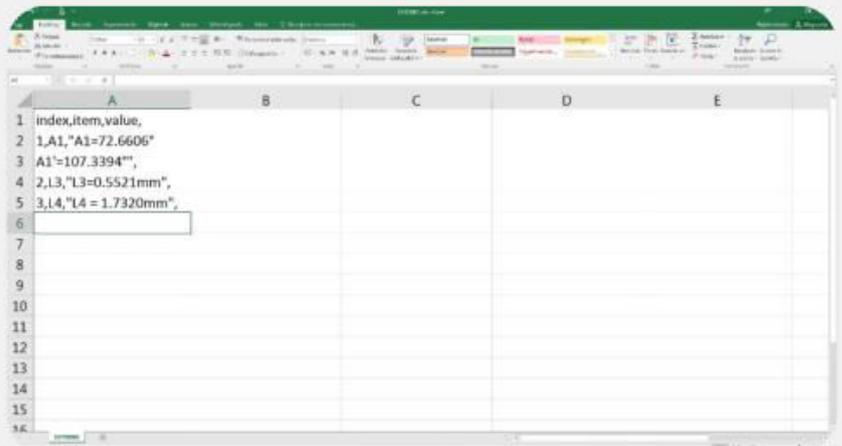
Measurement



Save to USB



Work on PC



## Camera Specifications

<b>Image spec</b>	1920x1080x24Bit	<b>Shoot Mode</b>	Manual/line control
<b>Resolution</b>	60 fps@1920x1080	<b>Storage Mode</b>	U Disk
<b>Optical Size</b>	1/3"	<b>Crosshairs</b>	Superpose or cancel
<b>Pixel Size</b>	3.75x3.75um	<b>Lens Mount</b>	C Mount
<b>Color Adjust</b>	R.G.B adjust individually	<b>Working voltage</b>	5V-12V
<b>WB</b>	One button/Manual	<b>Camera Size</b>	280x180x67mm
<b>Displayer Size</b>	11.6" 280x180x16mm	<b>Displayer Resolution</b>	1920*1080P
<b>Exposure</b>	Auto or Manual	<b>Weight</b>	450g
<b>Contrast</b>	Manual	<b>Working Temperature</b>	0-70°C

# Camera Operation Instructions

## Preparation before using

- ① Select appropriate lens for camera
- ② Fix the camera to the holder and match the light source
- ③ Turn on the power and make sure the monitor indicates that the power light is on.
- ④ Select language after booting. Simplified Chinese, Tradition Chinese and English are optional (Simplified Chinese is defaulted).



## Camera Settings

Select the camera settings in the auxiliary tool, set the camera's own properties according to the natural light, the intensity of the light, the ratio of red, green and blue, HDR is the suppression glare mode, and the left and right keys of the function keys are reduced or Increase the control of light; SE edge enhancement mode can improve the edge effect of the image by reducing or increasing the sharpening of the edge under specific requirements. But it also increases the noise of the image.



## Button Function

	Brightness		Contrast
<b>R</b>	Red adjust	SE	Edge enhancement
<b>G</b>	Green adjust	HDR	Wide Dynamic
<b>B</b>	Blue adjust		



- 1) To adjust the image: Use mouse to click the slide block and set, or click the slide block and then roll the mouse to get the set.
- 2) To add horizontal line and vertical line: Set the number of lines and press “ok” key, then you will see the lines as you set. Put the mouse to any line, mouse arrowhead will change to hand form then you can move this line to deserved position. Adjust the line slightly with mouse roller.

Put the mouse to any line and press right key to adjust the line attribute, it will show the set window to adjust the line color, thickness.

Each line is with its unique coordinate position, you can calculate and set the distance between two lines.



Central cross curve set: Press this button and it will show the set window, you can change the cross curve thickness and color.



Auto exposure set: Press this button and adjust the current brightness. Select the lower left quarter block to get the auto exposure.



White balance set: Put a white paper or abject under the lens, press WB button, camera will adjust RGB automatically under your lighting environment to make the color close to white. Select the lower left quarter block to get the auto white balance.



Photo button: Press this button to save the image. It will save to the U disk(if available) prior to camera internal storage.

**This machine has one USB port only. Please capture the picture with the remote control. Or an external USB extender to insert a USB flash drive to store images.**



Photo reading: Press this button to browse the images.



Image comparison: Press this button and get the image that needs to be compared, system will show this image into the right part of the screen, and show the real time image on the left of screen. Use the mouse to adjust the position of 2 images and compare.



Mirror image button: Mirror operate the image.



Image up and down adjust button: To adjust or switch the image from top to bottom.



Color and black/white convert: To select color or black/white mode for the image.



Freeze button: Current dynamic picture will be frozen by pressing this button, restore to dynamic picture by pressing this button again.

Press this button will freeze the current dynamic picture, pressing it again will restore the dynamic picture.



Electric frequency: Select the suitable electric frequency to avoid picture scroll.

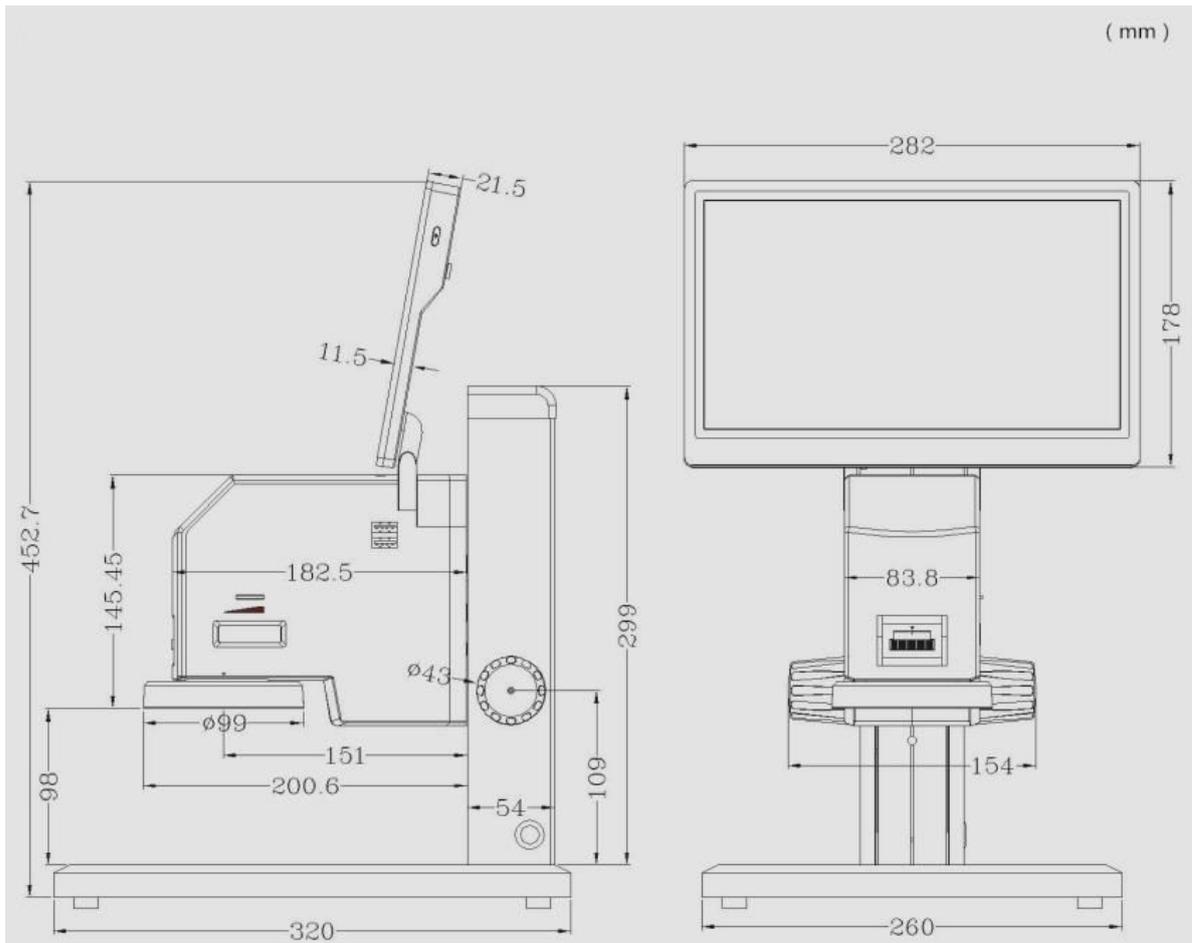


Color Temperature: To choose the right color temperature.



Frame selection area: You can draw the area of interest by dragging with the mouse to mark the key points.

## Product Size Chart:



Install Size Chart :

